Amendments to the Specification:

On page 28, replace paragraph starting at line 15 with the following:

If the random number, X, is less than or equal to the overall permission probability, PP, then the station is permitted to access the communications medium. The station sends traffic from a traffic category N where N is selected from the following criteria (block 530):

if $0 < X \leq TCPP_{\sout{1}0}$, then $N = 0$; else

if $\displaystyle\sum_{i=0}^{M-1} TCPP_i < X \leq \sum_{i=0}^{M} TCPP_i$, <u>where 1 ≤ M ≤ 7,</u> then $N = M$.

On page 29, replace the first and second paragraph with the following:

Here, $TCPP_{\sout{4}i}$ is the permission probability for traffic category i and is set to zero if traffic category i has no traffic to send from the station. The above expressions can be simpler stated as, traffic in category N will be transmitted if X lies within an interval ($\displaystyle\sum_{i=0}^{N-1} TCPP_i$, $\displaystyle\sum_{i=0}^{N} TCPP_i$].

There is a special case for $N = 0$, where the interval is (0, $TCPP_{[1]0}$]. After transmitting the traffic, the contention algorithm 500 ends (block 550).

On page 32, replace the paragraphs starting at line 11 and continuing to page 33 with the following:

The backoff time, J, was placed into a backoff timer that counts down idle time slots. However, the backoff timer does not count down until the medium is idle for a DIFS. Once the backoff timer expires (block 630), the station transmits.

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The station sends traffic from a traffic category N where N is selected from the following criteria (block 640):

if $0 < C * X \leq TCPP_{+0}$, then $N = 0$; else

if $\displaystyle\sum_{i=0}^{M-1} TCPP_i < C * X \leq \sum_{i=0}^{M} TCPP_i$, where 1 ≤ M ≤ 7, then $N = M$.

Here, $C = \displaystyle\sum_{i=0}^{Z} TCPP_i$, Z±1 is the number of traffic categories, and $TCPP_i$ are set to zero for traffic categories having no traffic to send from the station. The above expressions can be simpler stated as follows: Traffic in category N will be transmitted if $C*X$ lies within an interval ($\displaystyle\sum_{i=0}^{N-1} TCPP_i$, $\displaystyle\sum_{i=0}^{N} TCPP_i$].

There is a special case for $N = 0$, then the interval is (0, $TCPP_{+0}$]. The criteria above are displayed in graphical form in Figure 6b. After transmitting the traffic, the contention algorithm 600 ends (block 660).